

ABSTRACT OF THE DISCLOSURE

Method and system for switching and routing, while logically managing and controlling, multichannel optical signals in an optical communication system, featuring (a) an optical package array of optically connected: optical switch elements, left side and bottom side input ports, right side and top side output ports, and, (b) an operatively connected management and control logic mechanism (MCLM). The system is used for forming a variety of general and specific extendable all optical cross connect (AOXC) chained optical package (COP) architectures. MCLM logically manages and controls switching and routing of light entering and exiting the optical switch elements via input and output ports. Includes optional optical signal switching and routing functions of grouping, multicasting, adding and/or dropping, converting, and, restoring, of single and groups of a plurality of wavelengths. The optical switch elements are preferably voltage controlled Electroholography based optical switches. Three dimensional spatial representations of system structure and function are provided.